Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-29 (Cancelled).

30(Currently amended). An antibody against the protein according to claim [[42]] 58 or a fragment thereof.

31(Currently amended). The antibody according to claim 30 which is a polyclonal antibody, a monoclonal antibody or ~~a peptide~~ an antibody generated against a peptide fragment derived from a protein consisting of amino acid residues 54 to 282 of SEQ ID NO:2.

Claims 32-36 (Cancelled).

37(Currently amended). A ~~method~~ diagnostic marker for detecting a disease which consists of the protein of claim 58 ~~comprises measuring concentration, in blood or urine, of a protein as a diagnostic marker selected from the group consisting of:~~

~~(a) a protein having the amino acid sequence composed of 229 amino acid represented by residues 54 to 282 of SEQ ID NO:2 and having the serine protease activity;~~

~~(b) a protein encoded by a nucleotide which is hybridizable to a nucleotide complementary to a nucleotide having a nucleotide sequence represented by nucleotides 272 to 958 of SEQ ID NO:1 under stringent conditions, and having the same serine protease activity as that of the protein (a);~~

~~(c) a protein having the amino acid sequence composed of 229 amino acids represented by residues 48 to 276 of SEQ ID NO:4 and having the serine protease activity;~~

~~(d) a protein encoded by a nucleotide which is hybridizable to a nucleotide complementary to a nucleotide having a nucleotide sequence represented by nucleotides 244 to 930 of SEQ ID NO:3 under stringent conditions, and having the same serine protease activity as that of the protein (c);~~

~~(e) a protein having the amino acid sequence composed of 249 amino acids represented by residues 28 to 276 of SEQ ID NO:4 and, a mature form of which has the same serine protease activity as that of the protein (c);~~

~~(f) a protein encoded by a nucleotide which is hybridizable to a nucleotide complementary to a nucleotide having a nucleotide sequence represented by nucleotides 184 to 930 of SEQ ID NO:3 under stringent conditions and, a mature form of which has the same serine protease activity as that of the protein (c);~~

~~(g) a protein having the amino acid sequence composed of 276 amino acids represented by residues 1 to 276 of SEQ ID NO:4 and, a mature form of which has the same serine protease activity as that of the protein (c);~~

~~(h) a protein encoded by a nucleotide which is hybridizable to a nucleotide complementary to a nucleotide having a nucleotide sequence represented by nucleotides 103 to 930 of SEQ ID NO:3 under stringent condition, and a mature form of which has the same serine protease activity as that of the protein (c);~~

~~(i) a protein having the amino acid sequence composed of 254 amino acids represented by residues 22 to 275 of SEQ ID NO:6 and having the serine protease activity;~~

~~(j) a protein encoded by a nucleotide which is hybridizable to a nucleotide complementary to a nucleotide having a nucleotide sequence represented by nucleotides 114 to 875 of SEQ ID NO:5 under stringent conditions, and having the same serine protease activity as that of the protein (i);~~

~~(k) a protein having the amino acid sequence composed of 275 amino acids represented by residues 1 to 275 of SEQ ID NO:6 and, a mature form which has the same serine protease activity as that of the protein (i);~~

~~(l) a protein encoded by a nucleotide which is hybridizable to a nucleotide complementary to a nucleotide having a nucleotide sequence represented by nucleotides 51 to 875 of SEQ~~

~~ID NO:5 under stringent conditions, and a mature form of which has the same serine protease activity as that of the protein (i); and~~

~~(m) a modified derivative or fragment of those proteins (a) to (l)~~.

38(Currently amended). The ~~method~~ diagnostic marker according to claim 37, wherein the disease is Alzheimer's disease or epilepsy in the brain.

39(Currently amended). The ~~method~~ diagnostic marker according to claim 37, wherein the disease is cancer or inflammation of brain, medulla, prostate, placenta, heart, testicle or lung.

40(Currently amended). The ~~method~~ diagnostic marker according to claim 37, wherein the disease is sterility in semen or ~~sperms~~ sperm.

41(Currently amended). The diagnostic marker according to claim 37, wherein the disease is ~~to be used for diagnosis of~~ prostatic hypertrophy in the prostate.

Claims 42-50 (Cancelled).

51(Currently amended). A pharmaceutical composition comprising the protein according to claim [[42]] 58.

Claims 52-57 (Cancelled).

58(New). A protein consisting of amino acid residues 54 to 282 of SEQ ID NO:2.